

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2000-CE-56-AD; Amendment 39-13099; AD 2003-07-03]

RIN 2120-AA64

Airworthiness Directives; Twin Commander Aircraft Corporation Models 690D, 695A, and 695B Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to certain Twin Commander Aircraft Corporation (TCAC) Models 690D, 695A, and 695B airplanes. This AD requires you to initially inspect and modify and repetitively inspect areas of the wing and fuselage structure for fatigue damage and modify or replace any damaged parts. This AD is the result of tests that show that the service life of certain airplane parts cannot be reached unless an inspection and modification program (with any necessary replacements or modifications if fatigue damage is found) is incorporated. The actions specified by this AD are intended to detect and correct fatigue damage in the wing and fuselage areas without reducing the service life of the airplane. Such undetected and uncorrected damage could result in structural failure with consequent loss of control of the airplane.

DATES: This AD becomes effective on May 16, 2003. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of May 16, 2003.

ADDRESSES: You may get the service information referenced in this AD from Twin Commander Aircraft Corporation, 19010 59th Drive NE., Arlington, Washington 98223-7832; telephone: (360) 435-9797; facsimile: (360) 435-1112. You may view this information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-CE-56-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Della Swartz, Aerospace Engineer, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4065; telephone: (425) 687-4246; facsimile: (425) 687-4248.

SUPPLEMENTARY INFORMATION:

Discussion

What Events Have Caused This AD?

The FAA has received results of fatigue testing of the wing and fuselage structure on Models 690D, 695A, and 695B airplanes. These results reveal that fatigue damage could occur prior to the published service lives.

TCAC has developed an inspection and modification program to detect and correct fatigue damage in the wing and fuselage areas without reducing the service life of the airplanes.

What Is the Potential Impact if FAA Took No Action?

Such fatigue damage, if not detected and corrected, could result in structural failure with consequent loss of control of the airplane.

Has FAA Taken Any Action to This Point?

We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain TCAC Models 690D, 695A, and 695B airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on December 3, 2002 (67 FR 71904). The NPRM proposed to require you to repetitively inspect areas of the wing and fuselage structure for fatigue damage and modify or replace any damaged parts.

Was the Public Invited To Comment?

The FAA encouraged interested persons to participate in the making of this amendment. We did not receive any comments on the proposed rule or on our determination of the cost to the public.

FAA's Determination

What Is FAA's Final Determination on This Issue?

After careful review of all available information related to the subject presented above, we have determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. We have determined that these minor corrections:

- Provide the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Cost Impact

How Many Airplanes Does This AD Impact?

We estimate that this AD affects 108 airplanes in the U.S. registry.

What Is the Cost Impact of This AD on Owners/Operators of the Affected Airplanes?

We estimate the following costs to do the inspection for TCAC Models 690D, 695A, and 695B airplanes:

Inspection only labor cost for each airplane	Total inspection cost on U.S. operators
Minimum 270 workhours x \$60 per hour = \$16,200	Minimum: \$1,749,600.
Maximum 416 workhours x \$60 each hour = \$24,960	Maximum: \$2,695,680.

We estimate the following costs to do any necessary modifications that will be required based on the results of the inspection. We have no way of finding out the number of airplanes that may need modifications:

Costs	Minimum	Maximum
Labor Costs	81 workhours x \$60 per hour = \$4,860	2,790 workhours x \$60 per hour = \$167,400.
Estimated Parts Cost	\$2,847	\$65,978.
Estimated Total Cost for Each Airplane	\$7,707	\$233,378.
Total Cost on U.S. Operators	\$832,356	\$25,204,824.

Compliance Time

Why Is the Initial Compliance Time Presented in Hours Time-in-Service (TIS) and Calendar Time?

Normally, fatigue problems carry a compliance time based solely upon hours TIS, e.g., upon accumulating a certain amount of hours TIS. However, the number of airplanes that still need to have the initial actions of this AD accomplished compared to the number of authorized repair centers justifies a compliance time of both hours TIS and calendar time, whichever occurs first.

TCAC estimates 125 airplanes worldwide (about 87 percent of the worldwide fleet) that still need to have the initial inspections accomplished. This 87 percent would amount to 94 of the 108 U.S.-registered airplanes with only 7 authorized service centers accredited to do the work. The FAA has worked with TCAC in establishing a compliance table that categorizes the airplanes based upon the amount of hours TIS each airplane has accumulated.

This will ensure that the service centers have adequate time to accomplish the actions required by this AD.

Regulatory Impact

Does This AD Impact Various Entities?

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

Does This AD Involve a Significant Rule or Regulatory Action?

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. FAA amends § 39.13 by adding a new AD to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2003-07-03 Twin Commander Aircraft Corporation: Amendment 39-13099; Docket No. 2000-CE-56-AD.

(a) *What airplanes are affected by this AD?* This AD affects the following Twin Commander Aviation Corporation (TCAC) airplane models and serial numbers that are certificated in any category:

Model	Serial Nos.
690D	15001 through 15036 and 15038 through 15040.
695A	96001 through 96062, 96065 through 96068, 96070, 96071, 96073, 96074, 96076, 96077, and 96079 through 96084, 96086, 96087, and 96089 through 96100.
695B	96063, 96069, 96075, 96078, 96085, and 96204 through 96208.

(b) *Who must comply with this AD?* Anyone who wishes to operate any of the airplanes identified in paragraph (a) of this AD must comply with this AD.

(c) *What problem does this AD address?* The actions specified by this AD are intended to detect and correct fatigue damage in the wing and fuselage areas without reducing the service life of the airplane. Such undetected and uncorrected damage could result in structural failure with consequent loss of control of the airplane.

(d) *What must I do to address this problem?* To address this problem, you must initially inspect and modify the wing and fuselage areas (Part 1 Inspection/Modifications as identified in Twin Commander Aircraft Corporation Mandatory Service Bulletin No. 214, dated January 26, 2000) and repetitively inspect with necessary modification or replacement of damaged parts (Part 2 Recurrent Inspections as identified in Twin Commander Aircraft Corporation Mandatory Service Bulletin No. 214, dated January 26, 2000) in accordance with the following schedules:

(1) Part 1 Initial Inspections/Modifications: Initially (unless already done) accomplish the Part 1 Inspections/Modifications at whichever compliance time in paragraph (d)(1)(i) or (d)(1)(ii) of this AD that occurs later:

(i) the compliance times presented in Part 1 Table 1 of Twin Commander Aircraft Corporation Mandatory Service Bulletin No. 214, dated January 26, 2000; Twin Commander Aircraft Corporation Service Publications revision notice to Service Bulletin No. 214, Revision 1, Release Date: April 19, 2000; and Twin Commander Aircraft Corporation Service Publications revision notice to Service Bulletin No. 214, Revision 2, Release Date: May 21, 2001; or

(ii) the Table A compliance times presented on page 1 of the service information and replicated below:

Current airframe hours time-in-service (TIS)	Initial compliance time
(A) 0000 through 1,700	Upon accumulating 2,700 hours TIS or within the next 36 months after May 16, 2003 (the effective date of this AD), whichever occurs first.
(B) 1,701 through 2,500	Upon accumulating 3,400 hours TIS or within the next 36 months after May 16, 2003 (the effective date of this AD), whichever occurs first.
(C) 2,501 through 3,000	Upon accumulating 3,800 hours TIS or within the next 36 months after May 16, 2003 (the effective date of this AD), whichever occurs first.
(D) 3,001 through 5,000	Upon accumulating 5,500 hours TIS or within the next 30 months after May 16, 2003 (the effective date of this AD), whichever occurs first.
(E) 5,001 through 6,000	Upon accumulating 6,400 hours TIS or within the next 24 months after May 16, 2003 (the effective date of this AD), whichever occurs first.
(F) 6,001 through 7,500	Upon accumulating 7,800 hours TIS or within the next 18 months after May 16, 2003 (the effective date of this AD), whichever occurs first.
(G) Over 7,500	Within the next 12 months after May 16, 2003 (the effective date of this AD).

(2) Part 2 Recurring Inspections: Repetitively inspect as referenced in Part 2 Recurring Inspections on page 62 of Twin Commander Aircraft Corporation Mandatory Service Bulletin No. 214, dated January 26, 2000; Twin Commander Aircraft Corporation Service Publications revision notice to Service Bulletin No. 214, Revision 1, Release Date: April 19, 2000; and Twin Commander Aircraft Corporation Service Publications revision notice to Service Bulletin No. 214, Revision 2, Release Date: May 21, 2001.

(3) Mandatory Replacements and Modifications: If any damage is found during any inspection required by paragraphs (d), (d)(1), and (d)(2) of this AD, prior to further flight, replace or modify the part as specified in the following:

(i) Twin Commander Aircraft Corporation Mandatory Service Bulletin No. 214, dated January 26, 2000;

(ii) Twin Commander Aircraft Corporation Service Publications revision notice to Service Bulletin No. 214, Revision 1, Release Date: April 19, 2000; and

(iii) Twin Commander Aircraft Corporation Service Publications revision notice to Service Bulletin No. 214, Revision 2, Release Date: May 21, 2001.

(e) *Can I comply with this AD in any other way?* You may use an alternative method of compliance or adjust the compliance time if:

(1) Your alternative method of compliance provides an equivalent level of safety; and

(2) The Manager, Seattle Aircraft Certification Office (ACO), approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note: This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(f) *Where can I get information about any already-approved alternative methods of compliance?* Contact Della Swartz, Aerospace Engineer, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW, Renton, Washington 98055-4065; telephone: (425) 687-4246; facsimile: (425) 687-4248.

(g) *What if I need to fly the airplane to another location to comply with this AD?* The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(h) *Are any service bulletins incorporated into this AD by reference?* Actions required by this AD must be done in accordance with Twin Commander Aircraft Corporation Mandatory Service Bulletin No. 214, dated January 26, 2000; Twin Commander Aircraft Corporation Service Bulletin No. 214, Revision 1, Release Date: April 19, 2000; and Twin Commander Aircraft Corporation Service Bulletin No. 214, Revision 2, Release Date: May 21, 2001. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You may get copies from Twin Commander Aircraft Corporation, 19010 59th Drive N.E., Arlington, Washington 98223-7832; telephone: (360) 435-9797; facsimile: (360) 435-1112. You may view copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(i) *When does this amendment become effective?* This amendment becomes effective on May 16, 2003.

Issued in Kansas City, MO, on March 25, 2003.
Michael Gallagher,
Manager, Small Airplane Directorate, Aircraft Certification Service.
[FR Doc. 03-7745 Filed 4-2-03; 8:45 am]
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